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(54) **METHODS AND SYSTEMS FOR PROVIDING INFORMATION TO A HOME SYSTEM REGARDING A WIRELESS UNIT ROAMING IN A VISITED SYSTEM**

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(57) **ABSTRACT**

Methods and systems to provide a home system with information about a wireless unit roaming in a visited system based on information the wireless unit provides to the visited system. A mobile switching center (MSC-V) of the visited system receives the information from the wireless unit and routes a message to an international gateway. In response, the international gateway creates a new message or alters the original message, and transmits the new or altered message to a mobile switching center (MSC-H) of the home system. In response to receipt of the new or altered message, the MSC-H validates the wireless unit (if valid), creates a response to the new or altered message, and routes the response to the international gateway. The response may include an authorization period for the wireless unit and/or OCOS/TCOS information. In response, the international gateway creates a new response or alters the response, and transmits the new or altered response to the MSC-V. In response to receipt of the new or altered response, the MSC-V registers the wireless unit, provides the wireless unit with communication services in the visited system, or otherwise follows instructions in the new or altered response. If the wireless unit moves to an area served by a second MSC-V, the second MSC-V checks with the international gateway about the wireless unit. If an authorization period is in effect, the international gateway may provide a validation of the wireless unit to the second MSC-V without another message to the home system of the wireless unit.

23 Claims, 5 Drawing Sheets

